A New Name for *Murex rhyssus* DALL, 1919

(Mollusca: Gastropoda)

BY

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IN A PAPER in this journal entitled "On the Identity of *Murex macropterus* DESHAYES, 1839," I figured the type specimen and presented a synonymy of a related west American species that was described by DALL (1919) under the name of *Murex* (*Alipurpura*) *rhyssus* (see EMERSON, 1964, p. 153, pl. 20, fig. 1). Mrs. Emily H. Vokes of Tulane University has kindly informed me that DALL's taxon is preoccupied by *Murex* (*Pteronotus*) *rhysus* [*sic*] TATE (1888), a fossil from the Tertiary of Australia. Under the present Code (Article 58, section 6), "Two or more species-group names of the same origin and meaning and cited in the same nominal genus or collective group are to be considered homonyms if the only difference in spelling consists of . . . the use of a single or double consonant" (STOLL, *et al.*, 1961, pp. 55, 56). I take pleasure in renaming *Murex* (*Alipurpura*) *rhyssus* DALL (1919) in honor of Mrs. Vokes, who is an avid student of the Muricacea.

Pteropurpura* (*Pteropurpura*) *vokesae, new name

Murex (*Pteropurpura*) *petri* DALL, DALL, 1902, pl. 34, fig. 7 [U. S. N. M. cat. no. 122553]. Not *Murex petri* DALL, 1900.

Murex (*Alipurpura*) *rhyssus* DALL, 1919, vol. 56, p. 332; type locality: off San Pedro, California; type depository: holotype, in the U. S. National Museum, Washington, D. C., cat. no. 160500.

Murex (*Alipurpura*) *rhyssa* DALL, OLDROYD, 1927, p. 9, pl. 30, fig. 1 [figure of holotype].

Murex petri DALL, OLDROYD, 1927, pl. 28, fig. 7 [copy of DALL (1902), pl. 34, fig. 7]. Not *Murex petri* DALL, 1900.

Pteropurpura (?*Pteropurpura*) *rhyssa* (DALL), EMERSON, 1964, p. 153, pl. 20, fig. 1 [figure of holotype]

Not *Murex* (*Pteronotus*) *rhysus* TATE, 1888, pp. 95, 96, pl. i, fig. 7.

Type locality: Off San Pedro, California by original selection of DALL (1919).

Holotype: U. S. National Museum, cat. no. 160500 by original designation of DALL (1919).

Remarks: This species has been dredged off the coast of southern California, from San Pedro to San Diego, in depths of 10 to 50 fathoms. Although beach specimens are rarely found, specimens sometimes are found in kelp holdfasts that have been washed ashore.

Before proposing a new name for Dall's taxon, I undertook to determine the biological validity of this species, which approaches some specimens of the *Ocenebra erinaceoides* complex, especially the form named *Murex ealifornieus* by HINDS (1844a). Through the courtesy of Dr. Leo George Hertlein of the California Academy of Sciences and Mr. Emery P. Chace of the San Diego Natural History Museum, I recently examined the large series of specimens representing these taxa that are contained in the collections of these institutions. As a result of this study, I was able to conclude that Dall's taxon does not represent a northern population of the *Oeenebra erinaeeoides* complex. In contrast to *Pteropurpura vokesae*, which occurs subtidally, *O. erinaceoides* (VALENCIENNES) occurs commonly in the intertidal zone, ranging along the west coast of Baja California at Scammon Lagoon, San Ignacio Lagoon, Santa María Bay, and Magdalena Bay and occurs in the upper half of the Gulf of California from Punta Peñasco, Sonora and Puertecitos, Baja California southward to Guaymas, Sonora and Concepción Bay, Baja California. These distributional patterns suggest that *Pteropurpura vokesae* is restricted to the subtidal waters of the Californian faunal province, whereas the northern populations of *O. erinaeeoides* are apparently limited to the warm waters of several of the bays in the southern transitional zone of the Californian province and the subtropical to tropical waters of the extreme northern part of the Panamic faunal province.

It should be noted in passing that the original description of *Murex erinaeeoides* VALENCIENNES (1832, p. 302) is largely undiagnostic, a conclusion reached by CARPENTER (1857 a, p. 527) more than one hundred

years ago. Although VALENCIENNES did not illustrate this species, he did compare it with *Murex erinaceus* LINNAEUS from Europe and gave "Habitat ad portum Acapulco" [Guerrero, Mexico] for the type locality. CARPENTER (1857 b, pp. 170, 172) also pointed out that several of the species described by VALENCIENNES from Acapulco are foreign to Mexican waters, and the descriptions of the species were written nearly thirty years after the collections were made, a factor which might account for additional errors in VALENCIENNES' report. Inasmuch as specimens answering VALENCIENNES' description of *Murex erinaceoides* have not been subsequently reported from this section of the Mexican coast, an attempt should be made to locate and determine the identity of the type specimens of this taxon. *Murex californicus* HINDS (1844 a), on the other hand, was figured by HINDS (1844 b) and was cited from "California," presumably Baja California, Mexico. HERTLEIN (1953) briefly discussed the species of the *Ocenebra erinaceoides* complex and suggested that a subspecific name, *O. erinaceoides californica* (HINDS), be applied to specimens from Baja California.

In recent years, the trivaricate species that form the group of *Pteropurpura* generally have been placed in the muricid genus *Pterynotus* (*sensu lato*). This assignment, however, is not tenable owing to the presence of a purpuroid operculum in the group of *Pteropurpura* JOUSSEAUME (EMERSON, 1964). For the present time, I propose to recognize *Pteropurpura* as a polynominate genus in the subfamily Ocenebrinae for several groups of closely related species having three prominent varices (EMERSON, 1960).

ADDENDUM

I should like to take this opportunity to record a postscript to my recent paper on the identity of *Murex macropterus* DESHAYES (EMERSON, 1964). Dr. A. Myra Keen and Mr. James H. McLean of Stanford University have called my attention to the fact that BERRY (1956, p. 150) gave a historical review of this taxon and stated with reference to *Pteropurpura carpenteri* (DALL), "It appears not impossible that the oldest name for this species is *Murex macropteron* [sic] DESHAYES." Dr. Berry's conclusion apparently was based largely on comparisons of the Californian shells with drawings in REEVE (1845) and SOWERBY (1880), neither of which appears to represent the holotype of *Murex macropterus*. The original figures of *M. macropterus* (DESHAYES, 1841, pl. 38) were copied by KIENER (1843, *Murex* pl. 32, figs. 2, 2′). REEVE (1845, *Murex* pl. 27, sp. 123) figured a second specimen, from "the collection of Miss Saul." KÜSTER & KOBELT (1878, *Murex* pl. 34, figs. 10, 11) illustrated what may represent a third specimen. SOWERBY (1880, p. 24, *Murex* pl. 11, fig. 111) gave a poor copy of REEVE's figure and stated that there was another specimen in the British Museum (Natural History) which is probably the one figured by EMERSON (1964, pl. 19, fig. 3). TRYON (1880, pl. 40, fig. 517) presented a crude copy of REEVE's figure.

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Western Australian Cowries

(Mollusca: Gastropoda)

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(Plate 5; 1 Map)

A SEARCH OF PERTINENT LITERATURE reveals that little is known about the distribution of the cowrie fauna of Western Australia. Since MENKE's report "Mollusks of Nova Hollandia" (1843), most of the studies and research on Australian mollusks has been confined to the southeastern and Queensland regions. H. F. ANGAS worked on this area from 1865 to 1878; JOHN BRAZIER, from 1872 to 1875; and CHARLES HEDLEY, from 1894 to 1908. The work of ANGAS was restricted principally to the study of cowrie distribution in the area of Port Jackson (Sydney); BRAZIER referred to the western species rather generally, and with incomplete data; HEDLEY seems to have produced the first checklist of Western Australian *Cypraea*, drawing upon the reports of other authors to compile his list of 34 species. All these lists furnish information about certain species found at different points in the western area but deal largely in generalities where locality is concerned, and in some instances other data are vague or lacking.

During the past three years, with the able assistance of active collectors in the field, I have endeavored to bring the records up to date, compiling a list of verified species and localities, determining when possible the population centers, and recording other pertinent data not previously published. The present paper is not intended to be an exhaustive treatment of the Cypraeidae of Western Australia but an attempt to furnish as complete a list as possible of the different known forms. These records will be based entirely upon the field work of men known to me personally and upon specimens in my own collection that carry reliable collecting data.

From the beginning I have had the enthusiastic assistance of one of the most active collectors of *Cypraea* in Western Australia, Mr. A. R. Whitworth; his help has provided the basic framework for nearly all of the present study. I have also had substantial help from Mr. Ted Crake of Broome, who has contributed generously with specimens, maps, and information on ecology. Locality records for specimens not collected by either Whitworth or Crake have been verified though correspondence with the late B. E. Bardwell of Broome or with other reliable collectors. Some of the records were furnished by Dr. Tom Richert and Mr. Clifton S. Weaver of Honolulu, who collected 29 species of *Cypraea* at Long Island in Exmouth Gulf while participating in the DAVINA EXPEDITION in 1960. Special thanks are also due to Dr. F. A. Schilder, who very kindly furnished his manuscript list of Western Australian cowrie species as well as his statis-